

A WIRE BEETLE RECEPTACLE FOR JAPANESE BEETLE TRAPS

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As a part of the Japanese beetle suppression activities of the New Jersey Department of Agriculture, observations concerning the operation of the mechanical trap have led to the introduction of a few changes in design, which appear to be well placed. The standard mechanical trap as developed by the Federal Japanese Beetle Laboratory at Moorestown, N. J., consists of a funnel with a surmounted baffle, the body or can, the bait receptacle, and a beetle receptacle (heretofore a pint or quart glass jar) affixed to the bottom of the can. The shortcomings of the glass jar beetle receptacle are:

1. Capacity usually restricted to a pint or quart.
2. Becomes fouled by beetle excretions and regurgitations, necessitating frequent washing.
3. Almost airtight condition results in generation of odors, damaging to the efficiency of the trap.

The idea of a wire mesh beetle receptacle to replace the glass jar was conceived while observing traps in operation during the summer of 1930 at Elmer, N. J. A local tinsmith was employed to construct several wire receptacles which were subsequently tried and found to be more practical than the glass jar. During the fall of 1930 a detachable rigid wire mesh receptacle, of three quart capacity was designed. Plate XXXXIV illustrates the wire receptacle as well as the mode of attachment to the bottom of the trap. A quarter turn of the receptacle is necessary for attachment and detachment. The wire beetle receptacle was given a thorough trial during the beetle season of 1931, and demonstrated quite convincingly the following advantages:

1. Capacity of 4 quarts may be attained without appreciable addition of weight. Capacity is important on days of heavy flight. Plate XXXXV shows trap filled to top of funnel with

beetles (about five quarts) captured from 10 A. M. to 2:30 P. M., July 12, 1931.

2. Cleaning or washing of receptacle is not necessary.

3. Aeration of the mass of captured beetles delays the appearance of decomposition odors several days after capture.

PLATE XXXXIV

Parts of trap showing the wire receptacle and the method of attaching it to the bottom of the trap.



PLATE XXXXV

Trap filled to the top of the funnel with beetles

